2001 Mystery Hills wildfire offers firefighters snapshot of 1947

by Doug Newbould

The big, lumbering thunderheads marched single-file northeast along the western foothills of the Kenai Mountains.

These were no ordinary peninsula storm cells—these were the "real deal," with the characteristic anvil shape, dark bottoms and snow-white tops at 30,000 feet. Storms like these always inspire a sense of awe in me, as I have witnessed their power so many times in the western half of the United States.

No, these weren't the monsters of eastern Colorado with 50,000-foot tops, softball-sized hail, spin-off tornados and microbursts that flatten mature forests. These were a kinder, gentler variety. Here on the Kenai, thunderstorms tend to be wet. On those few occasions when lightning connects with the ground here, resulting fires tend to get "rained out."

On this day however, there were only a few showers—these were essentially dry thunderstorms—a rarity on the peninsula.

It was Thursday, June 28, 2001, about 6 o'clock in the evening. I was driving along Kalifornsky Beach Road when I heard the radio traffic on a State Forestry frequency. One of Forestry's engine patrols, while driving east on the Sterling Highway, spotted lightning strikes in the Mystery Hills—a few miles north of the highway.

A few moments later, a smoke column appeared in the same area. From the firefighter's description of the smoke column and its location, I knew the fire was on the Kenai National Wildlife Refuge. So I pointed my truck at the Division of Forestry office, just as my cell phone began to ring.

Little did I realize at the time that the next 10 days of my life would be consumed, as the Refuge and State Forestry joined forces to manage a wildfire in the Mystery Hills.

The phone call (as expected) was from Forestry, to notify me (the land manager) there was a fire on the refuge and to find out how the refuge wanted to manage the fire. I said I would be there in five minutes.

In the meantime, we agreed that Forestry should go ahead and launch its helicopter to fly over the fire and do a size-up: get a precise location; describe the fire size, the rate of spread and fire behavior; and describe the surrounding fire environment (local weather, fuels, terrain features and values at risk). This information would be critical to our decision-making process.

Even as I drove to Soldotna Forestry, and as the helitack ship was on its way to gather fire information, I was already thinking about some of the known factors that would influence our decisions. I knew the fire was in a limited suppression response zone, which does not mandate initial attack (as would a fire in a full or critical response zone), but essentially allows the fire/land manager to use an appropriate fire management response from a full range of options: from a monitoring (no suppression) response to a full or total suppression response, or something in between. The keys to this decision process would be gathering good information, making sound management decisions, and documenting the reasons for those decisions.

Another known factor was the drought conditions we were experiencing on the Kenai Peninsula. We use the Canadian Forest Fire Danger Rating System (CFFDRS) here in Alaska to monitor fire weather and fuel conditions.

All of the CFFDRS indices, including the Drought Code, the Fire Weather Index and the Build-up Index, were at extreme fire danger levels at all of the local weather stations on June 28.

One of the lessons we fire managers learned from the fires at Yellowstone (1988) and Los Alamos, (2000), is that wildfires quickly become uncontrollable during drought conditions. I was on one of those Yellowstone fires in '88 and many other large project fires in my career, and I know how difficult wildfires are to control when forest fuels are impacted by drought.

A third factor to consider in deciding how best to manage the Mystery Hills Fire was the availability of fire suppression resources.

The Kenai Lake Fire on the Chugach National Forest near Crown Point had already drawn a number of Alaska firefighting resources, including two Kenai

refuge fire engines, several Hotshot crews and aircraft, and a Type-1 incident management team from the Lower 48.

Many other Alaska crews and aircraft were committed to the large fires in the Alaska Interior. So even if the decision were made to attack or suppress the Mystery Hills Fire, there was no guarantee that adequate firefighting resources would be available.

A fourth factor was the approach of the Fourth of July holiday and the thousands of refuge visitors who would likely be traveling the Sterling Highway, recreating in the Skilak Lake area and canoeing on refuge trails.

The prospect of evacuating a neighborhood or a campground is daunting enough, but evacuating backcountry recreationists is even more problematic because you don't really know where people are located.

By the time I drove through the Soldotna construction and tourist traffic gauntlet and pulled into the parking lot at state Forestry, the helicopter crew was already circling over the fire and radioing size-up information to Forestry dispatch.

As it turned out, there were two fires burning in the Mystery Hills. The first fire (Mystery Hills) was about 2 miles north of the Sterling Highway and 1.5 miles east of the Mystery Creek Road.

Strong downdrafts from the thunderstorms were pushing the fire downslope to the south and west, through dense stands of black spruce.

The second fire (Thurman Creek) was several miles away to the northeast, near the confluence of Thurman Creek and the Chickaloon River in the Mystery Hills Wilderness.

It was burning hotly upslope (to the east) in mixed forest fuels. Initially, the Thurman Creek Fire was the more active of the two, but its more remote location and direction of spread made it less of a threat to public safety.

Next week: Battling the blaze

Doug Newbould is the fire management officer at the Kenai National Wildlife Refuge. Previous Refuge Notebook columns can be viewed on the Web at http://kenai.fws.gov.